UNIStim Software Release 5.5.1 for 1100 / 1200 Series / 2007 IP Deskphones: Read me Document

Avaya is pleased to announce the availability of UNIStim Software Release 5.5.1 for the 1100 Series, 1200 Series, and 2007 IP Deskphones. UNIStim Software Release 5.5.1 is primarily a maintenance release but also includes support for security and management enhancements.

UNIStim Software Release 5.5.1 is available in the following software versions for the following IP Deskphones:

UNIStim Software Release 5.5.1	
Hardware Model	**Software**
2007 IP Deskphone	0621C8T
1110 IP Deskphone	0623C8T
1120E IP Deskphone	0624C8T
1140E IP Deskphone	0625C8T
1150E IP Deskphone	0627C8T
1165E IP Deskphone	0626C8T
1210 IP Deskphone	062AC8T
1220 IP Deskphone	062AC8T
1230 IP Deskphone	062AC8T

UNIStim Software Release 5.5.1 for IP Deskphones is available for download from http://support.avaya.com/. Select "Downloads & Documents', and then enter the product name "1100 Series IP Deskphones", or '1200 Series IP Deskphones', or '2000 IP Deskphones". Choose "UNIStim 5.x" from the 'Choose Release' pull-down menu and click on "UNIStim Software Release 5.5.1 for IP Deskphones".

This release is being provided as a no charge update to all customers. These software loads have not yet been introduced as the default loads for the IP Deskphones shipped from Avaya.

Avaya recommends an upgrade to this release of software for all applicable IP Deskphones and Call Servers at the earliest convenience. This software is compatible with the following Call Server platforms:

- Avaya Communications Server 1000 (CS1000)
- Avaya Business Communications Manager (BCM)
- Avaya Survivable Remote Gateway (SRG)

See the section on 'Call Server Compatibility and Requirements' later in this document for minimum software and Release requirements. Support with Avaya Communications Server 2100 will be confirmed at a later date.

Enhancements

UNIStim Software Release 5.5.1 includes enhancements that make the 1100 Series, 1200 Series and 2007 IP Deskphones more secure, and easier to manage remotely.

- Ability to remotely monitor the PC port of the IP Deskphones

Copyright Avaya 2013 All rights reserved

- Auto-renewal of SSL certificates with SCEP, enabling more efficient management of SSL certificates for customers requiring higher security
- Enhanced security through password protection for access to port mirroring, and the ability to disable port mirroring which is used for Avaya and third party Secure Call Recording
- Enhanced security through password protection for access to AEM port

Ability to remotely monitor the PC port of the IP Deskphones

This enables network administrators to remotely diagnose the PC-to-IP Phone Ethernet connection. UNIStim 5.5.1 introduces a new command, showPCPortStatistics, into the Avaya Problem Determination Tool (PDT) shell available on Avaya 1100 Series, 1200 Series, and 2007 IP Deskphones through an SSH connection. The command prints various network statistics related to the PC Port, previously available only in IP Phone's Local Diagnostics > Ethernet Statistics menu.

The command showPCPortStatistics has no parameters and prints the following information about the PC Port:

- Type of negotiation/port speed/duplex mode, configured and actual
- Link state
- Number of transmitted and received packets
- Frame errors detected
- Number of FCS errors and alignment errors detected
- Number of collisions detected
- Data 802.1q settings
- PC Port Untag All setting

Auto-renewal of SSL certificates with SCEP

Modern SCEP servers like MS Windows Server 2008 R2 support SCEP certificate re-enrollment (renewal) requests. Renewal requests allow replacing already installed CA certificates without user interaction. For more information on how to use this new feature, please see the IP Deskphone Fundamentals NN43001-368 document.

Enhanced security – password protection access to port mirroring

This enhancement is intended to prevent unauthorized enablement of the PC port mirroring. A new option is configurable in the Local Diagnostics > Advanced Diag Tools menu that enables or disables port mirroring. This menu is protected with the administrator password, so changing the port mirroring mode is only possible after authorization.

Enhanced security – password protection access to AEM port

This enhancement is intended to prevent unauthorized access to the phone's debug port, which is now disabled by default. A new option is configurable in the Local Diagnostics > Advanced Diag Tools menu that enables or disables the debug port. This menu is protected with the administrator password, so changing the debug port mode is only possible after authorization.

Copyright Avaya 2013 All rights reserved

Quality Improvements

The UNIStim Software Release 5.5.1 for IP Deskphones continues to improve the overall quality of the IP Deskphone software through the resolution of several Avaya identified work items, and a number of externally reported issues from customers.

Ticket	Priority	Summary of Resolved Issue
IPCLIENTS-620	2	1165E crash when trying to download large JPEG image file to Flash
SR 1-3644733142	2	File system corruption prevents phone from rebooting
1-1YMOANI,1-1Z1YPB3	3	PC connected to phone sometimes causes phone lockup
SR 1-4011963615	3	No ringback tone on 1120 phones with AVAYA FW 0624C8L (Unistim 5.4)
SR 1-3872214764	3	Clicking noise on 11xx phones
SR 1-4039514852	4	Root Certificate Authority imported in 1140 shows wrong validity date
SR 1-4207362048	4	GEM displays bleeding/ghosting characters

IP Deskphone Compatibility

The following Software files contain UNIStim Software Release 5.5.1 compatible with the following IP Deskphones:

IP Deskphone Compatibility		
PEC	**Description**	**Software File**
NTDU96xxxxxx	2007 IP Deskphone	0621C8T.bin
NTYS02xxxxxx	1110 IP Deskphone	0623C8T.bin
NTYS03xxxxxx	1120E IP Deskphone	0624C8T.bin
NTYS05xxxxxx	1140E IP Deskphone	0625C8T.bin
NTYS06xxxxxx	1150E IP Deskphone	0627C8T.bin
NTYS07xxxxxx	1165E IP Deskphone	0626C8T.bin
NTYS18xxxxxx	1210 IP Deskphone	062AC8T.bin
NTYS19xxxxxx	1220 IP Deskphone	062AC8T.bin
NTYS20xxxxxx	1230 IP Deskphone	062AC8T.bin

Call Server Compatibility and Requirements

UNIStim Software Release 5.5.1 is compatible with the Avaya Call Servers listed below.

Communication Server 1000

Communication Server 1000 Compatibility and Requirements	
Call Server Release	**Notes and Advisements**

Copyright Avaya 2013 All rights reserved

CS1000 R7.6	Please see the Product Advisement related to Zero Touch Provisioning.
CS1000 R7.5	Please see the Product Advisement related to Zero Touch Provisioning.
CS1000 R7.0	Please see the Product Advisement related to Zero Touch Provisioning.
CS 1000 R6.0 - IP Line 6.00.18 - SS (Linux App) 6.00.018	Please see the Product Advisement related to Zero Touch Provisioning. Support for DTLS is available for UNIStim IP Deskphone Software Release 4.0 and above, with Communication Server 1000 (CS1000) Release 6.0, along with the following service updates. nortel-cs1000-tps-6.00.18.65-07.i386.000 nortel-cs1000-csv-6.00.18.65-04.i386.000 These service updates are available for download from the http://support.avaya.com/ website.
CS 1000 R5.5 - IP Line 5.5.12 - SS 5.5.12	Please see the Product Advisement related to Zero Touch Provisioning.
CS1000 R5.00W	Please see the Product Advisement related to Zero Touch Provisioning. The DTLS and SCR features are not supported on this platform. The 1200 Series IP Deskphones are not supported on this platform.

Survivable Remote Gateway

SRG Compatibility and Requirements	
Call Server Release	**Notes and Advisements**
SRG 50 R6.0 SRG 50 R5.0	Avaya recommends an upgrade to this UNIStim software release at the earliest opportunity. No SRG patches are required to support the Enhanced Software Download feature that allows the IP Deskphone software supported on the SRG50 to remain in synch with the Communication Server 1000 Main office. In addition, if the “Main” Communication Server 1000 is on release 4.5, or later, no patch is necessary on the Communication Server 1000 to upgrade the IP Deskphone. The 1150E and 1165E IP Deskphones are not supported on the SRG

Business Communication Manager:

BCM Compatibility and Requirements	
Call Server Release	**Notes and Advisements**
BCM 450 R6.0 BCM 50 R6.0	UNIStim 5.5.1 is supported on BCM 6.0 and BCM 5.0

Copyright Avaya 2013 All rights reserved

BCM 450 R5.0 BCM 50 R5.0	Upgrading the phone's software is dependent upon a BCM Smart Update (SU) that includes the UNIStim software. Avaya will be creating a formal patch for the BCM to add UNIStim 5.5.1 to the BCM 6.0 and BCM 5.0 software load. The 1150E and 1165E IP Deskphones are not supported on BCM. WML browser capability is not supported on BCM.
BCM 200/400 R4.0 BCM 450 R1 BCM 50 R3	UNIStim 5.5.1 will not be supported on these BCM releases, since these BCM releases are no longer supported. The last supported UNIStim version for these BCM systems is UNIStim 5.3 (062xC8J.bin files).

IP Deskphone Software Upgrade Methods (Communication Server Dependent)

Upgrading the IP Deskphone software in a Communication Server 1000 environment

The 2007, 1100 Series and 1200 Series IP Deskphones support remote software upgrades through both an HTTP/TFTP process and the more automated UFTP process direct from the Communication Server 1000. UNIStim Software Release 5.5 added support for HTTPS.

Note that the 1200 Series IP Deskphones are only supported on Communication Server 1000 release 5.5 or later. Therefore the software can be upgraded by either UFTP or HTTP/TFTP. UNIStim Software Release 5.5 added support for HTTPS.

Also note that the 1165E IP Deskphone is only supported on Communication Server 1000 release 5.0 or later. Therefore the software can be upgraded by either UFTP or HTTP/TFTP. UNIStim Software Release 5.5 added support for HTTPS.

For information on the HTTP/TFTP/HTTPS software upgrade process for the Communication Server 1000, please refer to the IP Deskphones Fundamentals, NN43001-368. For information on the UFTP software upgrade process for the Communication Server 1000, please refer to the IP Line Fundamentals, NN43100-500.

Upgrading the IP Deskphone software in a Survivable Remote Gateway (SRG) environment

For information on the software upgrade process for the SRG200/400, please refer to the Main Office Configuration Guide for SRG200/400 Rls1.5, 553-3001-207

For information on the software upgrade process for the SRG50, please refer to the Main Office Configuration Guide for SRG50 Rls 2.0, 553-3001-207.

Upgrading the IP Deskphone software in a Business Communication Manager (BCM) environment

Upgrading the IP Deskphone software is dependent upon a BCM system patch that includes the UNIStim software. This is applicable to all BCM platforms. BCM system patches will be delivered initially as atomic patches that are individually installable. These patches will be rolled up into a monthly Smart Update (SU) which includes all atomic patch content since the previous SU.

Patches and Smart Updates are posted for partner access at the http://support.avaya.com/ website under "Downloads", and search for BCM product to find the Smart Update for the appropriate BCM platform.

System Compatibility and Requirements

Copyright Avaya 2013 All rights reserved

System Compatibility and Requirements	
System	**Notes and Advisements**
Avaya (formerly Nortel) Contact Recording and Quality Monitoring (CRQM) 7.0	The Secure Call Recording feature in UNIStim Software Release 4.0 and higher interworks with Avaya (formerly Nortel) Contact Recording and Quality Monitoring release 7.0. For additional information on Avaya CRQM solution and its support for Secure Call Recording, please refer to the CRQM 7.0 Planning, Installation and Administration Guide, NN44480-300 See the Product Advisement related to Secure Call Recording.
Avaya (formerly Nortel) VPN Router (NVR) 8.00 or greater	The UNIStim VPN Client (UVC) feature in UNIStim Software Release 4.0 and higher interworks with Avaya (formerly Nortel) VPN Routers running release 8.00 and greater
Avaya (formerly Nortel) VPN Gateway (NVG) 8.0.1 or greater	The UNIStim VPN Client (UVC) feature in UNIStim Software Release 4.1 and higher interworks with Avaya (formerly Nortel) VPN Gateways running release 8.0.1 and greater
Nortel Application Gateway 2000 6.3 and higher	This software release provides support to interwork with Nortel Application Gateway 2000 (AG2000) release 6.3 The AG2000 does not support the 1150E IP Deskphone or 1165E IP Deskphone.
Secure Multimedia Controller (SMC) 1.0	This software release continues to provide support to interwork with the Secure Multimedia Controller (SMC) 2450.

Product Advisements

The following is a list of advisements associated with UNIStim Software Release 5.5.1. Some advisements remain from previous releases of software, whereas other advisements reflect newly observed or changed behavior introduced with UNIStim Software Release 5.5.1. Advisements that are new to UNIStim Software Release 5.5.1 or have changed since previous releases of UNIStim software are prefixed with “NEW”.

IMPORTANT NOTE for customers using Avaya Secure Call Recording and IP Deskphones.

Previously, a Product Advisement directed customers using secure call recording with Avaya Call Recorder (ACR) to **not** upgrade to UNIStim 5.3 or higher until an ACR patch (101055) was available. This was related to a CS1000 feature change for Secure Call Recording that was needed to address an issue with DTLS. A fix corrected the way the master secret used in SRTP key material generation was implemented. A corresponding change was needed on the ACR to allow Secure RTP to function. Patches were produced by Verint and tested for WFO 10.1.SP2 (patch 101052 or later) and the Controlled Introduction release ACR 10.1.SP2 FP (101201 or later). No changes were made for CRQM 7.0.

Note that the feature works with ACR 11.0 and above as part of the standard code. (No patch needed). The feature works with UNIStim 5.3 or above. The feature is enabled by setting the property file (acr.properties) entry on the ACR to dtls.nonstandard=2. If CS1K system is NOT using the DTLS sRTP master secret fix (UNIStim 5.3) then you DO NOT set this property and the patch will function as normal.

Copyright Avaya 2013 All rights reserved

IMPORTANT NOTE for customers still using earlier UNIStim Software Releases related to expired digital signatures.

Earlier UNIStim Software Releases including UNIStim Software releases 4.2, 4.3, and 5.0 have expired digital signatures that prevent successful downgrade of the IP Deskphones' software to those loads. If a software downgrade to these loads is attempted the error message 'FW authentication failure' will appear, and the phone will not accept the downgrade. All Software loads can absolutely be upgraded to UNIStim Release 5.5.1. UNIStim Software Releases since 5.1 have included digital signatures with a 10 year duration.

Important: Product Advisement for customers who previously upgraded to UNIStim 5.0 using the workaround related to Zero Touch Provisioning and have not yet upgraded to UNIStim 5.1 or 5.2:

For customers who previously upgraded to UNIStim 5.0 and used the recommended workaround detailed in the UNIStim 5.0 Readme Product Bulletin, related to pre-configured REG entries, this workaround needs to be removed to successfully upgrade to UNIStim 5.1 or later (including UNIStim 5.2, 5.3, 5.4, 5.5, and 5.5.1). That is, customers who have pre-configured REG entries, (which includes the MAC address, the TN, and Node) within the provisioning file to enable Zero Touch for the IP Deskphones, were previously advised of a problem that could occur related to parsing of the REG entry which prevented the IP Deskphones from coming up as expected. The recommended workaround for customers upgrading to UNIStim 5.0 was to add a comma before the semi-colon of the REG entry within the provisioning file. As noted in the UNIStim 5.0 Readme Product Bulletin, this issue is now fully addressed in this UNIStim 5.1 and higher software maintenance releases, and customers who applied the workaround will need to remove the comma to successfully upgrade to UNIStim 5.1 or later software release (including UNIStim 5.2, 5.3, 5.4, 5.5, and 5.5.1).

PUSH/WML not supported on the 2007 IP Deskphone when Hidden mode is enabled

The 2007 IP Deskphone does not support Push messaging including Audio Push when Hidden mode is enabled. This is documented in the NTP NN43001-368.

Home page is not loaded automatically after authentication credentials are entered

If the first use of the WML browser is to load the home page and the user is prompted for authentication credentials, the home page will not be automatically displayed after successfully entering the credentials. The user must press the Home softkey to display the homepage.

Red LED does not flash on incoming call if Audio Push is being received at the same time

On the 1110 and 1200 Series IP Deskphones, if an Audio Push is active when there is an incoming call, the red Call Alerting LED will not flash to indicate there is an incoming call.

SRTP PSK issue on BCM

An issue related to Private Shared Key (PSK) exchange via SRTP and payload type 120 has been observed with BCM which can result in poor voice quality. In the scenario, when the BCM50 receives the RTP packet with payload type 120, the BCM begins to send 'Play DTMF' UNIStim messages continuously in the same stream ID as in the Open Audio stream message, and the DTMF tones are transmitted to the far-end phone. When the number of RTP packets with payload type 120 becomes too large, the call quality is degraded. The current workaround for this issue is to configure a different Payload ID for SRTP PSK, or to disable SRTP PSK.

Slight change to the contrast level on the icons on the 1100 Series Expansion Module when the Module is attached to an 1165E IP Deskphone (applies to the 1165E IP Deskphone only)

After upgrading to firmware 0626C7J or higher on the 1165E IP Deskphone, if an 1100 Series Expansion Module is attached, the user will notice slight changes to the contrast levels on icons on the Expansion Module. The changes were necessary to improve the display quality during low contrast settings.

1110 IP Deskphone may experience a double reboot when upgrading software (applies to the 1110 IP Deskphone only)

If the 1110 IP Deskphone is upgraded (or downgraded) to (from) UNIStim Software Release 4.3 while Asian font files are installed in the phone, a double reboot may occur during the upgrade (or downgrade) procedure. After the second reboot, the phone will be fully operational and will maintain its selected language choice. This advisory is

Copyright Avaya 2013 All rights reserved

simply to provide notification that the upgrade (or downgrade) procedure may now be lengthened due to the double reboot.

IP Deskphone may appear locked when downloading large font files over the VPN (applies to the 1120E, 1140E, 1150E and 1165E IP Deskphones)

It has been discovered that when using the VPN feature on home based phones, that the IP Deskphone may appear locked when downloading large files (such as font files) to the IP Deskphone. This issue is due to Internet delay and the fact that the IP Deskphone's TFTP client is inefficient to transfer large files across the Internet. Unfortunately the IP Deskphone does not have a progress indication to inform the user that the download is still in progress and in fact the IP Deskphone is not locked.

Users are advised to wait should the IP Deskphone be downloading font files over the Internet. As an additional measure, one can also look to the back of the phone at the link activity LED to confirm network activity is still occurring and in fact that the phone is not locked.

A USB Hub cannot be used to simultaneously connect a mouse and a keyboard to the USB port of the 2007 IP Deskphone (applies to the 2007 IP Deskphone only)

The USB port on the 2007 IP Deskphone will not support the connection of both a mouse and a keyboard connected via a USB hub. The USB port on the 2007 IP Deskphone is restricted to support either a USB mouse or a USB keyboard, but not both simultaneously.

A two-step upgrade may be required to load UNIStim Software Release 4.3 or higher on the 2007 IP Deskphone (applies to the 2007 IP Deskphone only)

Due to changes in the memory structure of the 2007 IP Deskphone, a 2-step upgrade may be required to load UNIStim Software Release 4.3 onto the 2007 IP Deskphone if the upgrade is performed with HTTP/TFTP. If the 2007 IP Deskphone is currently running UNIStim Software Release 3.2 (0621C6M) or greater, then it will be able to upgrade directly to UNIStim Software Release 4.3 or higher, using HTTP/TFTP. But if the 2007 IP Deskphone is running any software prior to UNIStim Software Release 3.2 and the upgrade is performed with TFTP, then the phone must first be upgraded to UNIStim Software Release 3.2 before subsequently upgrading to UNIStim software 4.3. The 2-step upgrade is not required if the upgrade is performed from the call server using UFTP.

Minimum allowable software on the 1150E IP Deskphone for phone hardware vintages by PEC

Hardware changes in past vintages of 1150E IP Deskphones impose a restriction on the minimum allowable software version on these IP Deskphones. The latest phone hardware will absolutely accept an upgrade to this UNIStim Software Release. But the latest hardware 1150E IP Deskphone will NOT accept a downgrade to any software version previous to UNIStim Software Release 3.4 (0627C6T). Any attempt to download a software version previous to UNIStim Software Release 3.4 will result in the phone responding with a denial of software downgrade response.

The minimum allowable software is dependent on the phone's PEC and hardware release number and is provided in the table below:

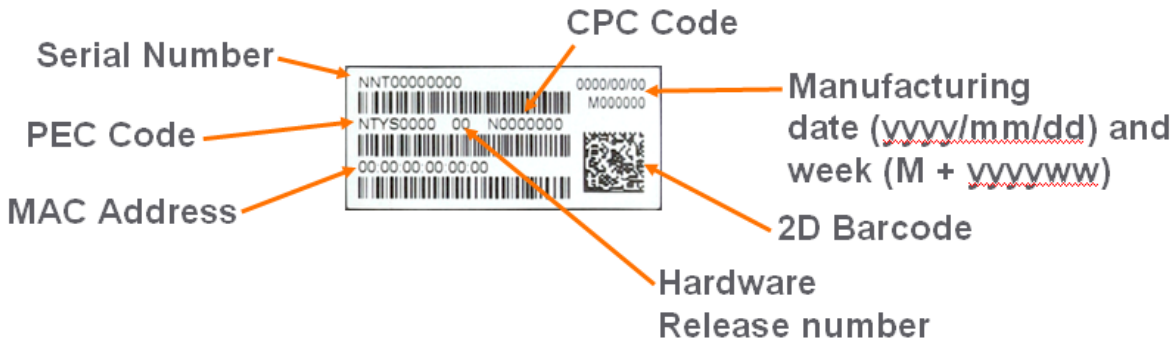
Minimum Allowable Software			
PEC	**Hardware Release**	**Description**	**Minimum Software**
NTYS06AAE6	07	1150E IP Deskphone Graphite with Icon Keycaps (RoHS)	UNIStim 3.4 (0627C6T)
NTYS06BAE6	07	1150E IP Deskphone Graphite with English keycaps (RoHS)	UNIStim 3.4 (0627C6T)
NTYS06ABE6*	01	1150E IP Deskphone Graphite with Icon Keycaps (RoHS)	UNIStim 3.4 (0627C6T)

Copyright Avaya 2013 All rights reserved

NTYS06BBE6*	01	1150E IP Deskphone Graphite with English keycaps (RoHS)	UNIStim 3.4 (0627C6T)
NTYS06ACE6*	01	1150E IP Deskphone Graphite with Icon Keycaps (RoHS)	UNIStim 3.4 (0627C6T)
NTYS06BCE6*	01	1150E IP Deskphone Graphite with English keycaps (RoHS)	UNIStim 3.4 (0627C6T)

* Note that these PECs are for the Avaya-branded 1150E IP Deskphones. Note that UNIStim Software Release 4.2 is the minimum release of IP Deskphone software that includes Avaya branding for the graphical user interface and features that appear on the phone's display. There is not an absolute requirement to run UNIStim 4.2 or higher on the Avaya-branded hardware, but Avaya recommends an upgrade to the latest release of software for all applicable IP Deskphones and Call Servers at the earliest convenience.

The Figure below provides an explanation of where to identify the PEC and Hardware Release Number on the white product label located on the back of the IP Deskphone.



If UFTP software download is used within the Communication Server 1000 environment, Avaya recommends that the software image for the 1150E IP Deskphone on the signaling server be upgraded minimally to UNIStim Software Release 3.4, if not UNIStim Software Release 5.5.1.

Communication Server 1000 Release 5.0, and greater, will interpret denial of software downgrade responses from the new hardware phones. However, Communication Server 1000 prior to release 5.0 requires patch MPLR23154 to interpret correctly the phone's denial of software downgrade responses. Failure to install the patch introduces the risk that the call server may continuously try and downgrade the software thereby denying service to the phone. MPLR23154 is available at VO status on the Avaya ESPL website and is deployed only by contacting your Technical Support Representative

If TFTP software download is used, and the TFTP server is not upgraded to UNIStim Software Release 3.4 or higher, the TFTP server will continuously try and downgrade the software in the phone. The new hardware phone will prevent the downgrade resulting in the phone being denied service.

Minimum allowable software is required on specific hardware vintages of the 1120E IP Deskphone and 1140E IP Deskphone (applies to the specific hardware releases noted for the 1120E IP Deskphone and the 1140E IP Deskphone below by PEC and Release Number)

Some past hardware changes in 1120E IP Deskphones and 1140E IP Deskphones impose a restriction on the minimum allowable software version on these phones. The newer hardware phones will absolutely accept an upgrade to UNIStim Software Release 5.5.1, but the following hardware vintages of 1120E IP Deskphone and 1140E IP Deskphone will NOT accept a downgrade to any software version previous to either UNIStim Software Release 3.1

Copyright Avaya 2013 All rights reserved

or UNIStim Software Release 3.4 respectively depending on the level of hardware changes. Any attempt to download a software version previous to minimum allowable software will result in the phone responding with a denial of software downgrade response.

The minimum allowable software is dependent on the phone's Product Engineering Code (PEC) and hardware Release Number and is provided in the table below.

Minimum Allowable Software			
PEC	**Hardware Release**	**Description**	**Minimum Software**
NTYS03ADE6	01	1120E IP Deskphone Graphite with Icon Keycaps (RoHS)	UNIStim 3.1 (0624C6J)
NTYS03BDE6	01	1120E IP Deskphone Graphite with English keycaps (RoHS)	UNIStim 3.1 (0624C6J)
NTYS03BDGS	01	1120E IP Deskphone GSA	UNIStim 3.1 (0624C6J)
NTYS05ACE6	50	1140E IP Deskphone Graphite with Icon Keycaps (RoHS)	UNIStim 3.1 (0625C6J)
NTYS05BCE6	50	1140E IP Deskphone Graphite with English keycaps (RoHS)	UNIStim 3.1 (0625C6J)
NTYS05BCGS	01	1140E IP Deskphone GSA	UNIStim 3.1 (0625C6J)
NTYS03AEE6	01	1120E IP Deskphone Graphite with Icon Keycaps (RoHS)	UNIStim 3.4 (0624C6T)
NTYS03BEE6	01	1120E IP Deskphone Graphite with English keycaps (RoHS)	UNIStim 3.4 (0624C6T)
NTYS03BEGS	01	1120E IP Deskphone GSA	UNIStim 3.4 (0624C6T)
NTYS05AEE6	01	1140E IP Deskphone Graphite with Icon Keycaps (RoHS)	UNIStim 3.4 (0625C6T)
NTYS05BEE6	01	1140E IP Deskphone Graphite with English keycaps (RoHS)	UNIStim 3.4 (0625C6T)
NTYS05BEGS	01	1140E IP Deskphone GSA	UNIStim 3.4 (0625C6T)
NTYS03AFE6 *	01	1120E IP Deskphone Graphite with Icon Keycaps (RoHS)	UNIStim 3.4 (0624C6T) *
NTYS03BFE6 *	01	1120E IP Deskphone Graphite with English keycaps (RoHS)	UNIStim 3.4 (0624C6T) *
NTYS03BFGS *	01	1120E IP Deskphone GSA	UNIStim 3.4 (0624C6T) *
NTYS05AFE6 *	01	1140E IP Deskphone Graphite with Icon Keycaps (RoHS)	UNIStim 3.4 (0625C6T) *
NTYS05BFE6 *	01	1140E IP Deskphone Graphite with English keycaps (RoHS)	UNIStim 3.4 (0625C6T) *
NTYS05BFGS *	01	1140E IP Deskphone GSA	UNIStim 3.4 (0625C6T) *
NTYS03AFE6*	15	1120E IP Deskphone Graphite with Icon Keycaps (RoHS)	UNIStim 5.4 (0624C8L)
NTYS03BFE6*	15	1120E IP Deskphone Graphite with English keycaps (RoHS)	UNIStim 5.4 (0624C8L)
NTYS03BFGS*	16	1120E IP Deskphone GSA	UNIStim 5.5 (0624C8Q)
NTYS05AFE6*	18	1140E IP Deskphone Graphite with Icon Keycaps (RoHS)	UNIStim 5.5 (0625C8Q)
NTYS05BFE6*	18	1140E IP Deskphone Graphite with English keycaps (RoHS)	UNIStim 5.5 (0625C8Q)
NTYS05BFGS*	19	1140E IP Deskphone GSA	UNIStim 5.5 (0625C8Q)

* Note that these PECs are for the Avaya-branded 1120E and 1140E IP Deskphone hardware. Note that UNIStim Software Release 4.2 (and later) is the minimum release of IP Deskphone software that includes Avaya branding for the graphical user interface and features that appear on the phone's display. There is not an absolute requirement to run UNIStim 4.2 or higher on the Avaya-branded hardware, but Avaya generally recommends an upgrade to the latest release of software for all applicable IP Deskphones and Call Servers at the earliest convenience.

Copyright Avaya 2013 All rights reserved

To identify the PEC and Hardware Release Number, see the Figure presented above which provides a diagram on the information on the white product label located on the back of the IP Deskphone.

If UFTP software download is used within the Communication Server 1000 environment, Avaya recommends that the software image for the 1120E IP Deskphone and 1140E IP Deskphone on the signaling server be upgraded to the minimum allowable software for the respective PEC and Hardware Release, or ideally to the latest available software release, UNIStim 5.5.1. See the Product Advisement related to Zero Touch Provisioning in this Product Bulletin.

Communication Server 1000 release 5.0, and greater, will interpret denial of software downgrade responses from the new hardware phones. However, Communication Server 1000 prior to release 5.0 requires patch MPLR23154 to interpret correctly the phones denial of software downgrade responses. Failure to install the patch introduces the risk that the call server may continuously try and downgrade the software thereby denying service to the phone. MPLR23154 is available at VO status on the Avaya ESPL website and is deployed only by contacting your Technical Support Representative

If TFTP software download is used, and the TFTP server is not upgraded to the minimum allowable software, or greater, the TFTP server will continuously try to downgrade the software in the phone. The new hardware phone will prevent the downgrade resulting in the phone being denied service.

In a Communication Server 1000 environment containing SRG and SRG50 branch office systems, two SRG Smart Updates (SU) exist to allow the SRG and SRG50 platforms respectively to interpret denial of software downgrade responses from the new hardware phones. Failure to install the patches introduces the risk that the call server may continuously try to downgrade the software thereby denying service to the phone.

For SRG 200 and SRG 400 release 1.5, the denial of software downgrade support is included in BCM.R400.SU.System.024 and later.

For SRG50 release 3.0, the denial of software downgrade support is included in BCM050.R300.SU.System-197 and later. This SU is not available for SRG50 release 2.0.

If the above SRG patches are not installed then the "umsUpgradeAll" Main Office system command should not be executed when the branch office site has the new hardware 1120E IP Deskphone or the new hardware 1140E IP Deskphone and the IP Deskphone software at the Main Office precedes UNIStim Software Release 3.1.

EAP-MD5 and Microsoft Windows Server 2008 (applies to all the IP Deskphones)

If access control is enabled on the IP Deskphone and MD5 is chosen as the EAP mode, realize that EAP can be turned on in the Microsoft Windows Server 2008 NPS[1] but it is not the default setting. Please refer to Microsoft support for more details on enabling EAP-MD5. In addition, minimally, Service Pack 2 is required on the Windows Server 2008 NPS to support the IP Deskphones using MD5 access control.

PC Port resets during software upgrade (applies to the 2007 IP Deskphone only)

The PC port on the IP Deskphones temporarily resets during software upgrades and during phone resets due to configuration changes. As a result, traffic to and from the network and a PC connected to the IP Deskphone's PC port will be disrupted during these periods.

Minimum firmware required on the Algo 4900 USB ATA (applies when the USB ATA is connected to an 1120E, 1140E, 1150E or 1165E IP Deskphones)

The Algo 4900 USB ATA must have firmware version v1.00.32v or greater before connecting the adapter to the IP Deskphone. A Windows based configuration tool to upgrade the ATA firmware version can be found at the Algo web site:

[1] In Windows Server 2008, IAS has been replaced with Network Policy Server (NPS)

Copyright Avaya 2013 All rights reserved

http://www.algosolutions.com/products/usbATA/fw-download.html

Also note that the Algo 4900 USB ATA is classified as a high power USB device and must be connected to an 1120E, 1140E and 1150E IP Deskphone through a powered USB hub. If it is connected to the IP Deskphone directly, it will cause the phone to completely shut off service to the USB port.

The 1165E IP Deskphone can support the Algo 4900 USB ATA connected directly as long as the 1165E IP Deskphone is locally powered with an AC adapter. If the 1165E IP Deskphone is obtaining its power from the network via Power over Ethernet (POE) then the Algo 4900 USB ATA must be connected through a powered USB hub

IP Deskphone's performance will be diminished during broadcast storms (applies to all the IP Deskphones)

By default, network traffic to the IP Deskphone will be accepted based on the packet's destination MAC address. The phone will therefore accept, in addition to all unicast packets sent to the phones MAC address, all broadcast and multicast packets as well. If the network environment results in a high amount of broadcast or multicast traffic, the IP Deskphone's performance may be impacted.

If "Voice 802.1Q" is enabled on the phone, the phone can then be provisioned to filter some or all of the broadcast or multicast traffic. If "VLAN Filter" is enabled, packets will be accepted by the phone based on the packet's destination MAC address as well as the packet's VLAN tag. Untagged packets and packets with a VLAN tag different from the Voice VLAN ID will be prevented from reaching the phone. This will protect the voice application from excessive traffic sent to the broadcast address or to the multicast addresses. But please be aware, if VLAN filtering is enabled on the phone, one must ensure that voice packets are tagged with the appropriate VLAN ID as they exit the network switch, or else the packets will be dropped by the filter.

Change in behavior of entering an asterisk (*) to manually provision the "Provision" parameter in the network configuration menu (applies to the 2007, 1120E, 1140E and 1150E IP Deskphones)

In UNIStim software prior to release 3.2 (0621C6M, 0624C6O, 0625C6O and 0627C6O on the 2007, 1120E, 1140E, and 1150E IP Deskphones respectively) the asterisk (*) key could not be used to input the dot (.) for defining an IP address in the "Provision" parameter in the network configuration menu. Since the "Provision" parameter in the network configuration menu can accept both an URL as well as an IP address the entry is a text based field causing the asterisk key to be accepted as an actual asterisk. But since this is different from other parameters that accept only an IP address where the asterisk key is used to represent the dot, the inconsistent behavior of this field can be confusing.

With UNIStim Software Release 3.2 and greater, the typing of the asterisk key in the "Provision" parameter in the network configuration menu has changed slightly. Now, if the asterisk key is pressed twice relatively quickly it will input the dot. Pressing the asterisk key once will still input the asterisk character consistent with previous behavior.

Throughput may be slow for large file transfers on conversions from GigE to 100Mbit (applies to the 1120E, 1140E, 1150E and 1165E IP Deskphones)

In networks in which a PC is connected to the IP Deskphone's PC port and the PC's NIC speed is 100Mbit but the network speed is at GigE, large file transfers to the PC can take quite a long time. This is an issue with large file transfers only. Due to the speed mismatch between the phone's two ports the buffers in the phone can overflow resulting in retransmissions.

Although the IP Deskphones support Ethernet flow control (802.3x), the support is only implemented on the phone's PC port, not on the phone's network port. Ethernet flow control is a mechanism were the IP Deskphone can request a brief "pause" from the transmitting Ethernet device if the IP Deskphone buffers are about to overflow.

Ethernet flow control cannot be implemented on the phone's network port since it impacts the phone's voice quality. As a result, in environments were the network is GigE but the PC NIC is only 100Mbit, large file transfers from the network to the PC can take quite a long time. On the other hand, since Ethernet flow control is implemented on the

Copyright Avaya 2013 All rights reserved

phone's PC port, in environments where the PC NIC is GigE but the network is only 100Mbits, large file transfers should be well managed by the phone's Ethernet flow control mechanism.

Receiving an LLDP MED Network Policy TLV from the network infrastructure will cause the IP Deskphone to ignore any DSCP value received from the Communication Server 1000 Element Manager and the Info Block (applies to all the IP Deskphones)

Because of the precedence order, in auto-provisioning mode (i.e. the value has not been overridden manually) if the IP Deskphone receives an LLDP MED Network Policy TLV from the network infrastructure, the phone will provision its DSCP from the LLDP MED Network Policy TLV and not from the Call Server or Info Block. When the phone receives a Network Policy TLV from the network infrastructure, it sets its voice VLAN, L2 Priority and DSCP to the value specified in the VLAN ID field, L2 Priority field and DSCP Value field respectively. Thus, if the Network Policy TLV is received, any QoS values also received from the Call Server (i.e. Telephony Manager and/or Element Manager) or Info Block it will be ignored.

Special Note: The feature "DSCP provisioning precedence override" available in UNIStim Software Release 3.3 and greater provides a work-around to this advisory.

IP Deskphone's default for Auto VLAN changed to "Enabled". Auto VLAN now supports a No VLAN option (applies to the 2007, 1110, 1120E, 1140E, 1150E, 1210, 1220 and 1230 IP Deskphones)

In software loads prior to UNIStim Software Release 2.2 for 2007, 1100 Series and 1200 Series IP Deskphones, one had to manually provision whether the phone was to be installed in an 802.1Q VLAN environment or not. The default configuration for the phone was assuming that the phone was not being deployed into an environment supporting a Voice VLAN. The default source for VLAN assignment was "no VLAN".

For the phones to be deployed into a voice VLAN environment, the phone had to be manually provisioned with either a Voice VLAN ID, or manually provisioned to accept an Auto VLAN assignment.

With UNIStim software commencing with release 2.2 and continuing with present UNIStim software the default configuration for the phone now has Auto VLAN assignment via DHCP enabled. Realizing that not all phones will be deployed in an 802.1Q VLAN environment, the Auto VLAN assignment support has also been updated to support both an 802.1Q VLAN environment and an environment without 802.1Q VLANs.

With Auto VLAN enabled, if VLAN information is provided within the DHCP option type VLAN-A, the phone will use the VLAN information to provision a voice VLAN. However, if no VLAN-A option type is provided by DHCP, the phone will assume that no VLAN is to be provisioned.

Although the default configuration for voice VLAN has changed, the new default configuration will not be applied to field upgrades. A limitation of the new functionality is that it could only apply to new phones being shipped from the factory with UNIStim Software Release 2.2 or higher. The default configuration of "Auto" will not be applied to field upgrades. Upgrading software does not change any pre-established values already in the phones.

But as mentioned above, to allow phones already deployed in the field to change the source of their VLAN information, with UNIStim Software Release 3.2 a new parameter called "vvsource" has been added to the Info Block to allow VLAN source to be auto-provisioned.

Important Note: While these changes provide greater flexibility, the change might impact the deployment of new phones into an existing deployment.

Manually provisioned link speed and duplex mode restored to "Auto" after software upgrade (applies to the 2007, 1120E, 1140E and 1150E IP Deskphones)

In UNIStim Software Release 1.3 (0621C3N, 0623C3F, 0624C3F, 0625C3F and 0627C3F for 2007, 1110, 1120E, 1140E and 1150E IP Deskphones respectively) greater low level network control available through the phones

Copyright Avaya 2013 All rights reserved

configuration menus was introduced. The greater control included allowing the link speed and the duplex mode on the IP Deskphones to be provisioned independently for both the network port and the PC port

By delivering this greater network control, the software unfortunately had to reset link speed and duplex mode back to "Auto" after an upgrade. Regrettably, preservation of the forced manual override could not be maintained during the upgrade.

What this means is that if the IP Deskphone is running software prior to UNIStim Software Release 1.3 and if the link speed was manually provisioned to force the link to 10Mbit Full Duplex or 100MBit Full Duplex, after upgrading the software to UNIStim Software Release 1.3 or greater (including the current UNIStim software), the link speed and duplex mode is reset to "Auto" representing Auto-negotiation. With the phone now configured for Auto-negotiation a duplex mode mis-match will occur if the other end of the link is still provisioned to force the link to 10Mbit Full Duplex or 100MBit Full Duplex.

But, since UNIStim Software Release 3.1 for IP Deskphones, the means to provision the network port speed and the network port duplex mode has been available in the Info-Block. If a duplex mis-match occurs as a result of the software upgrade, the speed and duplex mode can be forced by provisioning them via the Info Block. This is possible because the auto-negotiation will pick the correct speed but the wrong duplex mode. Since the speed is correct, but the duplex mode is wrong, transmission can occur, albeit of poor quality. The duplex mismatch will impact the time taken for the phone to receive the Info Block, but re-transmission mechanisms built into the transmission protocols should allow the Info Block to eventually be received by the phone thus correcting the resetting of link speed and duplex mode to "Auto".

Proportional spacing may not be optimal (applies to the 2007, 1110, 1120E, 1140E, 1150E and 1210 IP Deskphones)

The 2007, 1110, 1120E, 1140E, 1150E and 1210 IP Deskphones support graphical fonts. The supported fonts include hinting – or 'intelligence' – to the font outline, making the font more readable by preventing the letters in the font from becoming distorted and difficult to identify. But in some rare instances, the hinting may impact the proportional spacing resulting in characters appearing too close or too far apart.

Some models of Plantronics Bluetooth headset may unexpectedly become unpaired (applies to the 1140E, 1150E and 1165E IP Deskphones)

An issue was uncovered with certain Plantronics Bluetooth headsets (including the formerly validated Plantronics Voyager 510/510S) in which the headset may unexpectedly become unpaired. If the unpair occurs during an active call, all audio will be lost to and from the headset. In such a situation the call will remain active and the user is recommended to switch to handset or handsfree. Due to the severity of this issue, Avaya does not recommend the use of the Plantronics Voyager 510/510S headset.

2-step upgrade may be required (applies to the 1120E and 1140E IP Deskphones)

One important note when upgrading the 1120E IP Deskphone and 1140E IP Deskphone to this software release from any load previous to 0624C1B or 0625C1B respectively is that a 2-step upgrade **will** be required. The 1120E IP Deskphone and 1140E cannot be upgraded directly to the newly released software if they are currently running software previous to 0624C1B and 0625C1B respectively. Instead, the phones must first be upgraded to 0624C1B and 0625C1B or newer (recommend 0624C3G and 0625C3G). Once the phones are running at least 0624C1B and 0625C1B software, they will accept being upgraded to UNIStim Software Release 5.5.1 respectively.

2-step upgrade may be required to load Asian fonts (applies to the 2007 IP Deskphone only)

Adding Asian languages to a 2007 IP Deskphone running UNIStim Software Release 1.3 (0621C3N) or earlier requires a 2 step process since the configuration file format has changed to support the new font downloads.

1) One must first upgrade the 2007 IP Deskphone software to using TFTP with the former configuration files ("BasicConfig" folder) – or upgrade the software from the call server.

Copyright Avaya 2013 All rights reserved

2) Once the 2007 IP Deskphone is running the new software one must update the TFTP server to the new configuration files ("AsianConfig" folder) to download the Asian font files.

Running SRTP PSK with Communication Server 1000 release 5.0 requires a patch (applies to the 2007 and 1100 Series IP Deskphones)

In association with Communication Server 1000 release 5.0, UNIStim software since release 2.0 delivered media stream protection using SRTP UNIStim Keys (USK). However, running SRTP using PreShared Keys (PSK) is still a valid option in the IP Deskphones. But, if one wishes to run SRTP PSK with Communication Server release 5.0, patch MPLR24632 is required on the Communication Server 1000[2]. The Communication Server 1000 patch is located in the Meridian PEP library at the http://support.avaya.com/espl web site.

Current release of SRTP PSK is not backward compatible with older version of SRTP PSK (applies to the 2007, 1110, 1120E, 1140E and 1150E IP Deskphones)

As stated above, running SRTP using PreShared Keys (PSK) is still a valid option in the IP Deskphones. But one important note when upgrading the IP Deskphones to the current releases of software is to realize that the current release of SRTP PSK is not compatible with older versions of SRTP PSK. The minimum software releases for which the current release of SRTP PSK is backward compatible is UNIStim Software Release 1.3 (0621C3N, 0623C3G, 0624C3G, 0625C3G and 0627C3G for the 2007, 1110, 1120E, 1140E and 1150E IP Deskphone respectively).

Backlight Interaction with USB devices (applies to the 2007, 1120E, 1140E and 1150E IP Deskphones)

Some USB devices (i.e. Mice or Keyboards) send regular coordinate update messages to the phone even when the device is not being used. This can cause the sleep mode for the backlight to not be properly invoked.

Certain USB mice do not work with the 2007 IP Deskphone (applies to the 2007 IP Deskphone only)

It has been discovered that certain USB Mice do not work with the 2007 IP Deskphone. If the mouse does not transit information in the "Production", "Vendor" and "Manufacturing" fields of the USB communication exchange, the mouse will not be recognized by the 2007 IP Deskphone. Note that failure to send the above mentioned information is in violation of the USB communication exchange standard. Most leading brands of mice do send the required information.

Contrast adjustments: Local & TPS contrast adjustments are not synchronized (applies to the 1110, 1120E, 1140E and 1150E IP Deskphones)

The 1100 Series IP Deskphones' graphical display contrast control can be adjusted either locally (on the phone) or through the call server (TPS) control. The Communication Server 1000 does not yet synchronize its contrast setting with the local control. This means if the local control is used exclusively, then whenever the phone has a power cycle, the contrast setting provided by the Communication Server 1000 is restored and the user may need to adjust contrast again.

The local contrast control on the 1110, 1120E, 1140E and 1150E IP Deskphones is accessed by a "double press" of the Services key and selecting "1. Preferences", then "1. Display Settings" in the menu. The contrast control from the Communication Server is accessed with a "single press" of the Services key, then selecting "Telephone Options", then "Contrast Adjustment".

Volume adjustments are not persistent across phone resets (applies to all the IP Deskphones)

Even though the speech volume and ringer volume is controlled by the IP Deskphone, the user selected preferences are stored by the Communication Server 1000. Prior to release 5.0 of the Communication Server 1000, the server did not save the user selected preferences across a phone reboot. Thus, if the phone rebooted, for whatever reason, the speech volume and ringer volume would be reset to their default values. Upgrading to release 5.0 or greater of the Communication Server 1000 corrects this issue.

[2] The patch is not required on Communication Server 1000 Release 5.5

Copyright Avaya 2013 All rights reserved

Power disruption during software upgrade will corrupt the upgrade (applies to all the IP Deskphones)

During a software upgrade, if a power disruption is experienced by the phone, the software upgrade will fail. In some instances a power disruption during an upgrade may also corrupt the existing software on the phone. If this corruption should occur, the phone will fail over into its boot code known as "BootC". BootC will automatically try to restore the phone's software from the image on a call server. But for the 2007, the 1100 Series and the 1200 Series IP Deskphones, if the phone's software was obtained from a TFTP server instead, in order to restore, or upgrade, the software from BootC a manual TFTP download from BootC must be performed. The Manual TFTP Download from BootC Procedure is documented in the IP Phones Fundamentals NN43001-368. **Regardless, caution should be exercised to avoid power disruptions during software upgrades.**

References and Related Documents

For additional information on previous software releases and Readme Files for UNIStim Software Releases including those listed below, go to: http://support.avaya.com/. Select "Downloads & Documents', and then enter the product name "1100 Series IP Deskphones", or '1200 Series IP Deskphones', or '2000 IP Deskphones". Choose the appropriate link for the release you are interested in, for example "UNIStim 5.x" from the 'Choose Release' pull-down menu and then click on the document version you would like to access.

Product Bulletin – PCN 1902S – New Minimum Software Requirement for Upcoming Hardware Releases of 1120E and 1140E IP Deskphones

Product Bulletin – Readme file for UNIStim 5.5. Software Release for 1100 / 1200 / 2007 IP Deskphones

Product Bulletin – Readme file for UNIStim 5.4 Software Release for 1100 / 1200 / 2007 IP Deskphones

Product Bulletin – Readme file for UNIStim 5.3 Software Release for 1100 / 1200 / 2007 IP Deskphones.

Product Bulletin – Readme file for UNIStim 5.2 Software Release for 1100 / 1200 / 2007 IP Deskphones

Product Bulletin – Readme file for UNIStim 5.1 Software Release for 1100 / 1200 / 2007 IP Deskphones

Product Bulletin – Readme file for UNIStim 5.0 Software Release for 1100 / 1200 / 2007 IP Deskphones

Product Bulletin – Readme File for UNIStim 4.3 Software Release for 1100 / 1200 / 2007 IP Deskphones

Product Bulletin – Readme File for UNIStim 4.2 Software Release for 1100 / 1200 / 2007 IP Deskphones

Product Bulletin P-2010-0016-Global, UNIStim Software Release 4.1 for 1100 / 1200 / 2007 IP Deskphones

Product Bulletin P-2009-0143-Global, UNIStim Software Release 4.0 for 1100 / 1200 / 2007 IP DeskPhones

IP Phones Fundamentals, NN43001-368

Signaling Server IP Line Applications Fundamentals NN43001-125

Individual IP Deskphone User Guides for CS1000, BCM, SRG, CS2100, AS5300

CRQM 7.0 Planning, Installation and Administration Guide, NN44480-300

License Agreements

W3C(r) SOFTWARE NOTICE AND LICENSE

Copyright (c) 1994-2002 World Wide Web Consortium, (Massachusetts Institute of Technology, Institut National de Recherche en Informatique et en Automatique, Keio University).

Copyright Avaya 2013 All rights reserved

All Rights Reserved. http://www.w3.org/Consortium/Legal/

This W3C work (including software, documents, or other related items) is being provided by the copyright holders under the following license. By obtaining, using and/or copying this work, you (the licensee) agree that you have read, understood, and will comply with the following terms and conditions:

Permission to use, copy, modify, and distribute this software and its documentation, with or without modification, for any purpose and without fee or royalty is hereby granted, provided that you include the following on ALL copies of the software and documentation or portions thereof, including modifications, that you make: The full text of this NOTICE in a location viewable to users of the redistributed or derivative work.

Any pre-existing intellectual property disclaimers, notices, or terms and conditions. If none exist, a short notice of the following form (hypertext is preferred, text is permitted) should be used within the body of any redistributed or derivative code:

"Copyright (c) 2004 World Wide Web Consortium, (Massachusetts Institute of Technology, Institut National de Recherche en Informatique et en Automatique, Keio University). All Rights Reserved. http://www.w3.org/Consortium/Legal/"

Notice of any changes or modifications to the W3C files, including the date changes were made. (We recommend you provide URIs to the location from which the code is derived.)

THIS SOFTWARE AND DOCUMENTATION IS PROVIDED "AS IS," AND COPYRIGHT HOLDERS MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE OR DOCUMENTATION WILL NOT INFRINGE ANY THIRD PARTY PATENTS,

COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS.

COPYRIGHT HOLDERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE SOFTWARE OR DOCUMENTATION.

The name and trademarks of copyright holders June NOT be used in advertising or publicity pertaining to the software without specific, written prior permission.

Title to copyright in this software and any associated documentation will at all times remain with copyright holders.

Copyright (c) 1998, 1999, 2110 Thai Open Source Software Center Ltd

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OFMERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR

OTHER DEALINGS IN THE SOFTWARE.

HTTP Server functionality is provided by the GoAhead WebServer 2.1,

Copyright (c) 2004 GoAhead Software, Inc. All Rights Reserved.

© 2013 Avaya Inc. All Rights Reserved

Notice

While reasonable efforts were made to ensure that the information in this document was complete and accurate at the time of printing, Avaya Inc. can assume no liability for any errors. Changes and corrections to the information in this document may be incorporated in future releases.

Documentation disclaimer.

Avaya Inc. is not responsible for any modifications, additions, or deletions to the original published version of this documentation unless such modifications, additions, or deletions were performed by Avaya.

Link disclaimer

Avaya Inc. is not responsible for the contents or reliability of any linked Web sites referenced elsewhere within this Documentation, and Avaya does not necessarily endorse the products, services, or information described or offered within them. We cannot guarantee that these links will work all of the time and we have no control over the availability of the linked pages.

License

USE OR INSTALLATION OF THE PRODUCT INDICATES THE END USER'S ACCEPTANCE OF THE TERMS SET FORTH HEREIN AND THE GENERAL LICENSE TERMS AVAILABLE ON THE AVAYA WEBSITE AT http://support.avaya.com/LicenseInfo/ ("GENERAL LICENSE TERMS"). IF YOU DO NOT WISH TO BE BOUND BY THESE TERMS, YOU MUST RETURN THE PRODUCT(S) TO THE POINT OF PURCHASE WITHIN TEN (10) DAYS OF DELIVERY FOR A REFUND OR CREDIT. Avaya grants End User a license within the scope of the license types described below. The applicable number of licenses and units of capacity for which the license is granted will be one (1), unless a different number of licenses or units of capacity is specified in the Documentation or other materials available to End User. "Designated Processor" means a single stand-alone computing device. "Server" means a Designated Processor that hosts a software application to be accessed by multiple users. "Software" means the computer programs in object code, originally licensed by Avaya and ultimately utilized by End User, whether as stand-alone Products or pre-installed on Hardware. "Hardware" means the standard hardware Products, originally sold by Avaya and ultimately utilized by End User.

License Type(s):

Designated System(s) License (DS). End User June install and use each copy of the Software on only one Designated Processor, unless a different number of Designated Processors is indicated in the Documentation or other materials available to End User. Avaya June require the Designated Processor(s) to be identified by type, serial number, feature key, location or other specific designation, or to be provided by End User to Avaya through electronic means established by Avaya specifically for this purpose.

Copyright

Except where expressly stated otherwise, the Product is protected by copyright and other laws respecting proprietary rights. Unauthorized reproduction, transfer, and or use can be a criminal, as well as a civil, offense under the applicable law.

Third-party Components

Certain software programs or portions thereof included in the Product may contain software distributed under third party agreements (“Third Party Components”), which may contain terms that expand or limit rights to use certain portions of the Product (“Third Party Terms”). Information identifying Third Party Components and the Third Party Terms that apply to them is available on Avaya web site at: http://support.avaya.com/ThirdPartyLicense/

Trademarks

Avaya, Avaya Aura, Communications Manager and the Avaya logo are registered trademarks and/or service marks of Avaya Inc. in the U.S. and certain other jurisdictions.

All other trademarks are the property of their respective owners.

Copyright Avaya 2013 All rights reserved